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ABSTRACT

An analysis is provided of institutional research conducted by community colleges in an effort to draw conclusions about appropriate standards for different types of studies. The paper focuses on four categories of research: (1) research conducted to fulfill external reporting requirements and to influence policy at state and federal levels; (2) formative research on institutional efficiency as measured by teacher-student a full-time/part-time faculty ratios, institutional effectiveness or educational outcomes, community needs assessments, and faculty/staff evaluations; (3) research to inform decisionmaking for program development and change; and (4) studies conducted to improve public relations and marketing research. Guidelines are presented as standards for good institutional research, underscoring the importance of following acceptable sampling, statistical, definitional, and evaluative procedures; and of ensuring that research is timely and has practical applications. The final section of the paper analyzes six research reports; a program report on student retention by Gainesville College Georgia; and five California projects. These are: a marketing survey conducted by the Coast Community College District, a community needs assessment by Cerritos Community College, characteristics conducted by the San Francisco Community College District. (AYC)

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COMMUNITY COLLEGE INSTITUTIONAL RESEARCH: WHAT, WHY, AND HOW?

by

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COMMUNITY COLLEGE INSTITUTIONAL RESEARCH: WHAT, WHY, AND HOW?

In business, research and development (R&D) is usually the department last to be funded and first to go in times of budgetary crisis. The same is the case of community college institutional research (abbreviated IR). Anthony Zeiss, President of Pueblo Community College, Colorado, notes, "Of the 1,221 public community colleges in this country, it is estimated that only 60 percent have designated full-time institutional research persons (AACJC, 1985), yet as a relatively new system of higher education we have a tremendous need to understand what we are doing well, where we can improve, and what we should be anticipating in the future." (Zeiss, 1986, p. 37) In a local study of the 9 colleges in the Los Angeles Community College District, Stuart Wilcox states that "The certified research staff totaled to the equivalent of 7.25 full-time personnel, averaging 0.81 researchers per college." (Wilcox, 1982, p. 2) Obviously, IR is in general an area of few staff and monetary resources.

Decision-makers, as well as the researchers themselves, are concerned with the type, validity, and usefulness of the data collected by the IR offices. In the survey mentioned above, Stuart Wilcox concludes that about half an IR office's time is spent on self studies, that is, the identification of trends within the student population (demographics, program enrollment changes, grade

distribution, etc.), follow-up studies of graduates, and evaluation of programs and procedures. He also notes that, in the opinion of the researchers, more time and funds should be spent on just these types of activities. External reporting, such as filling out questionnaires, actually takes up only 9% of the IR office's time. (Wilcox, 1982)

One question then becomes: what can and should an IR office be doing? Clearly, in order to fulfill all the desired functions of such an office, more resources need to be allocated to this type of endeavor. Moreover, what is regarded as useful research changes with the preoccupations of different time periods. According to Edith Carter, the 1960s were characterized by an emphasis on the reporting of numbers of students enrolled, and growth in quality was seen as an end in itself. The 1970s saw a fine-tuning of the data-collection methods due to reporting requirements by state and federal funding and regulatory agencies and a concern with the impact of the emerging technologies. With stabilizing and occasionally declining enrollments of the early 1980s came a focus on impact studies, marketing, budgets, and fundraising, with a special emphasis on accountability. (Carter, 1986, pp. 85-86) In terms of what institutional research should be doing, Carter also dares to make the following controversial statement, "There is a growing concern that society can no longer afford education for the masses. The theme of the open door is being replaced with those of limited access, quality, and excellence. The concept of quantitative growth has been replaced with that of qualitative

growth." (Carter, 1986, p. 86) Some of these qualitative studies are beginning to appear in the literature, but they are more written about than carried out, for reasons shown below. The types of research currently being done may be divided into the following four main areas according to the purpose of the studies: external reporting, self-improvement (formative research), program decision-making (essentially cause/effect), and public relations and marketing. This paper will attempt to describe the components of these four areas, draw conclusions concerning appropriate standards for the different types of research, and conclude with a short analysis of six research reports from formative and marketing studies.

I. Interconnecting areas of research

Since institutional research is carried out at an individual college campus, it has frequently been termed "self study." (See Blai, 1982) Although certain theoreticians would thereby automatically cast doubt on the findings of such studies, suspecting that they were tainted by investigator bias (See e.g. Scriven, 1983), there is little doubt that in the day-to-day management of a college as well as in long-range planning, self study is necessary for such a multi-million dollar business to thrive in today's environment of tightening purse-strings and public requirements of accountability. It must be understood that

in segmenting out areas of research, I am merely presenting one set of eye-glasses through which to look at institutional research: there are many others. In a certain way, all research data can be utilized for formative purposes, that is, to compare how what one has measures up to one's standard of a desired state, be that 100% transfer of students to full universities, 100% student satisfaction with the educational experiences they are being offered, or some other criterion. One may also say that all data may be used for decision making: by the college administration locally, or by state and federal agencies. The data collected can be used for a variety of purposes, and for these diverging purposes different criteria of acceptability may be employed. Good research depends as much on what question is asked as on how the data are gathered and reported.

II. Areas of Institutional Research

A. External reporting and policy influencing purposes

"For many years, our colleges have suffered because policy makers were making intuitive judgments about our programs and students. Their conclusions were, at times, incorrect but convenient for a particular philosophy or preconceived notion. Their actions were usually unsupported by any real evaluation data." (George R. Boggs in the preface to the California

Association of Community Colleges [CACC] Commission on Research Report, 1988) In response to a decade of intense public scrutiny of the community colleges through questions relating to their accountability as publicly funded learning institutions, institutional research is now turning to not only supplying the question-askers with data, but also seeking to shape the policies of those political decision making bodies. Community college IR offices at the behest of their college presidents, CEOs, and boards are taking a proactive stance in addition to the necessary reactive mode of operation. Also according to the CACC report, "Institutional research provides external benefits by demonstrating to the general public, the legislature, and to others at the state level, that community college programs are effective, that students and society alike benefit from them, and that they are a wise expenditure of public funds." (CACC, 1988, p. 3) One may wish to be somewhat wary of such a statement, however, since it may lead to the invalid research strategy of coming up with conclusions in advance and then selecting data to fit these. Researchers as well as decision makers must be cautious of the tendency to see only what they want to see.

With the individual state providing more and more of the financial support of community colleges and making a significant number of policy decisions affecting these, there is now an increasing awareness of the importance of a good liaison with appropriate state agencies. According to Ivan Lach, "There has been a dramatic growth in the demand for information about community

college students, instructional programs, facilities, and personnel by the various state agencies that have a great impact on policy formulation for community colleges." (Lach, 1981, p. 7) The state's concern is to develop policy regarding all the community colleges within its borders, and for this reason community college IR often falls short of providing the kind of information needed. Cooperative and joint research efforts among all the state's community colleges is necessary to influence policy makers appropriately; however, the fact of the great diversity among individual community colleges makes this type of research extremely difficult. We know intuitively, and to a certain degree from research by outside critics, that urban colleges vary considerably from rural ones in the demographics of their student body, their objectives, their organization, and their history.

Influencing policy is also a concern regarding the community college's relationship with the federal government, and the same, if larger, caveats apply as with the state government. In the words of Cheryl Opacinch, "Federal postsecondary policy encompasses three major types of programs: (1) financial assistance programs in the form of grants and loans for graduate and undergraduate students that are designed to increase access to higher education, (2) institutional building programs that assist colleges in facilities building, and (3) categorical programs that provide assistance to improve the quality of instruction in general, or for a specialized clientele." (Opacinch, 1981, p. 18) Obtaining federal grant money is big business for all institutes of higher education, but since

community colleges have focused on teaching rather than theoretical research, they have not gone after the federal dollars with the same zeal that universities do. Although the availability of federally guaranteed student loans may be of importance in attracting students, state policies impinge on the situation of the community college far more and so has been focused on to the near exclusion of the relationship with the federal government.

One aspect of data-gathering frequently emphasized by outside researchers studying community colleges has been the function of transfer to four-year institutions. It seems, however, that this type of study is fraught with a certain defensiveness by the community colleges' institutional researchers, and very few reports have been published that try to get to grips with the problem. In the author's opinion, it would behoove the community college leadership to take the bull by the horns and engage in public debate of a definition of the concept of transfer, its priority in the set of college goals, and serious discussion of the realism behind an expectation that any institute of learning can take an underprepared student and, within the current fiscal constraints, turn her/him into a transferable college student. Richard Rinehart, in his article "Assessing successful articulation of transfer students," (Rinehart, 1977) has paid some heed to the transfer miasma, and the problem deserves more recognition by institutional research partly because it is used as the heaviest argument in giving community colleges failing grades as learning centers by outside critics. Two studies dealing with transfer will be

discussed in the last section of this paper.

In conclusion, the relationship between the outside political world and the community college is a two-way street: it influences the college's programs and policies and the college may attempt to influence it. According to Warren Groff, "The external environment includes demographic trends, social indicators, economic trends, political change, technological advances, changes in the workplace, information technologies, value shifts, and numerous other variables." (Groff, 1986, p. 62) Institutional research must attempt to analyze current trends in all these areas and predict future populations if it is to be of value relative to external funding sources and critics.

B. Institutional research for self-improvement

The bulk of published studies of community college institutional research concerns the importance of formative research to the individual college. There is considerable duplication of effort in this area, not surprisingly, perhaps, since each community college tends to see itself as unique and that studies conducted at other colleges can only with difficulty be generalized to be relevant to it.

Of the many sub-purposes of formative research, I would here like to consider the following: efficiency studies, effectiveness studies, needs assessments, and faculty/staff assessments. I would

also like to separate out research geared toward decision making into a category by itself because I feel that this is at a different conceptual^{level} than the above: decision making is the application of research rather than a primary purpose for it.

1) Efficiency studies

Efficiency studies concern the cost of a teacher-student ratio, the employment of full-time vs. part-time faculty, the use of facilities, energy usage, class offerings and cancellations, etc. To determine a level of efficiency, one must compare the factual findings to a stated criterion, e.g. graduation or transfer rates. William Kennedy of Cuyahoga Community College puts it in these terms, "Under the pressure of the budget crunch that many two-year colleges are now experiencing (and will undoubtedly experience to a greater degree in the 1980s), many decision makers are looking to make hard decisions that will impact their schools for several years by utilizing a cost-effectiveness model. This type of evaluation document will frequently contain such breakouts as input variables, process variables, output variables, and outcome variables, content variables, contextual variables, etc." (Kennedy, 1981, p. 2) The focus of these studies are the questions: are we using our resources to their fullest potential? Compared to our goals and our mission, can we use them more effectively? Where should we put our major effort in requesting funding: in buildings, equipment, teachers, staff, materials, new programs, etc.?

Financial planning has a large role in the area of efficiency in times of budget cuts and declining enrollment. Stevenson and Walleri note, "Financial decision making includes resource allocation, utilization, and accountability. This also includes the processes of planning, budgeting, spending, and accounting or evaluation." (Stevenson and Walleri, 1981, p. 83) Since answers to questions of resource allocations are mostly relevant to individual colleges, institutional research is generally commissioned with the gathering of appropriate data for such purposes.

2) Effectiveness/outcome studies

In addition to using its resources efficiently, community colleges are increasingly being held accountable for producing a measurable effect of learning in its students. Institutional research is needed to determine what these effects are and whether and to which degree they meet expectations. A variety of methods are used, the most frequent being standardized tests of several domains of learning, observations, longitudinal follow-up studies of students' performance in other educational institutions or in the job marketplace, and teacher rating of outcomes. According to Kay McCullough Moore of Alamo Community College District in San Antonio, Texas, "The major challenge now is to discover meaningful and useful ways of distinguishing between effective and ineffective institutions, programs, processes, and even people." (McCullough

Moore, 1986, p. 51) A crucial question becomes what constitutes reasonable measures of effectiveness considering community colleges' unique "open door" access policies. Community colleges (unlike four-year institutions and universities) cannot wave away the problem by selecting only the top students who are sure to succeed no matter what they are given by way of education. For this reason, a "value added" approach to measuring learning has been adopted by many schools. In simple terms, the "value added" concept consists of pre-testing, post-testing, and determining the amount of "added value" that the school has been responsible for creating in the students. As Oscar Lenning states, quoting Hart (1971), "Institutions should be judged not by their outputs alone, but by their outputs relative to their inputs." (Lenning, 1977, p. 15) A student who comes to the college reading at the seventh grade level may exit a course or a year reading at a 12th grade level, while another who comes in reading at a 10th grade level may only advance to 13th. One would then conclude that the former student had had more value added than the latter even though his/her score was actually lower. Naturally, there are many pitfalls in such research, the primary being the attribution of cause and effect. Researchers are aware that there may be a host of external circumstances influencing test achievements, and perhaps only a small part of the improvement can be attributed to the influence of the school. However, careful planning and in-depth knowledge of research and evaluation issues can at least help control for such confounding factors.

Standardized achievement testing is not, of course, the only method used in higher education to assess learning. Criterion-referenced tests have become increasingly popular through the 1970s and 1980s. (See Lenning 1977, p. 12) In addition, observation of simulations is another way to assess learning, a very promising one, but one which requires a high level of observer competence, problems of inter-rater reliability, etc. that may be beyond the scope of semester-end community college assessments.

Most community colleges offer a variety of different programs: vocational (unfortunately called "terminal") programs at different levels of complexity, remedial programs, traditional liberal arts programs, and a world of different not-for-credit courses. All of these expect learning to take place, but they need to be assessed in different ways depending on the type of learning emphasized. Valid evaluation for these must take into account both what the students can and cannot do upon entry and in what domain the learning is expected to occur. Is it purely academic? A standardized test might do. It is skills-oriented? Then a demonstration of those skills would have to be a requirement for course exit. Is social awareness and attitude (perseverance, values, etc.) included in the program objectives? Then these too would have to be assessed. No one instrument or approach can be said to serve for all the purposes of all the programs offered at a community college. As McCullough Moore states, " Because effectiveness is multidimensional and educational outcomes are multiple and diverse, it must be obvious that there can be no

single criterion for institutional effectiveness." (McCullough Moore, 1986, p. 54) Institutional research of outcomes must also take into consideration the philosophical question of the extent to which any educational program can contribute to the social mobility of its customers. Brent Shea adds the admonition, "The exclusive concern with academic achievement has resulted in the reported failure of previous innovative programs, owing to their lack impact on of cognitive development." (Shea, 1977, p. 82) Quite simply, a program's total objectives in all domains must be made clear before any evaluation of its impact can validly be made.

3. Needs assessment studies

Essential to the formative evaluation of community college programs is the question: who are our present and potential students? Studies in this area concern population demographics, the stated purposes of attending by students, their entering skill levels, etc. The formative purpose is: how can we meet our population's needs better? Taking one step backwards in determining needs is the acknowledgment that any declaration of a need is based on a set of values. To put it somewhat facetiously: we find that the majority of our constituents cannot read Ulysses with a high degree of comprehension, nor can they carry out CPR. Does that automatically constitute a need? Any need must be seen relative to a goal and the value of that goal.

So-called needs assessments are carried out by at least three different groups for divergent purposes. The first is the one we are concerned with in this article: higher education institutional research offices. They generally want to discover how many people in their locality want what they have to offer and what this interest-group is like. This may be seen as partly marketing and partly program planning. Secondly, state and federal planning offices conduct needs assessments to ensure more or less equal access to education within their jurisdiction. Thirdly, external researchers at colleges and universities conduct demographic and interest surveys for their own research needs. One may safely say that there is no dearth of demographic data available; the problem may lie more in the distinctions ^d make in the categories of respondents and the interpretations of the results. The national census produces volumes of demographic data, the National Center for Education Statistics is a reliable source, and, in addition, state planning offices supplement the colleges' own local surveys in describing the community characteristics. For the interest of the individual community college, however, the most important step in considering another needs assessment is to clearly define its need for information. Patricia Cross, in a highly informative article, states that the needs assessor could be more successful by obtaining information that "helped determine how a course should be structured, how and where it should be advertised to reach the target population, when and where it should be offered to provide convenience to the largest number of potential students, what

auxiliary services would be required by students, and what other courses they might take concurrently with (the course in question)." Cross, 1979, pp. 197-198) The best community college needs assessments do just this. Cross also alerts us to the importance of attempting to plan for future needs. The CACC report on institutional research asks these questions: "What are the important demographic, economic, and social trends in the state and in the communities that will be affecting community colleges? What will be the nature of the colleges' communities in the future? Who will be the potential students?" (CACC, 1988, p. 3) Trends analyses, understanding of the marketplace, and a good dollop of visionary enthusiasm are needed to try to plan for the future and not only fight the fires of today.

4. Faculty and staff development

Due to the forces of the employment marketplace, this area of research does not seem to produce a large share of the articles written about ^rof by community college institutional research. There are many more qualified teachers than the colleges can employ, and with current systems of collective bargaining and tenure, there is little incentive for community college faculty to take a great interest in self-improvement. Secondly, for financial reasons, many community colleges utilize a heavily part-time faculty and spending money on their improvement seems to be economically self-defeating. However, the passing of Assembly Bill 1725 in California

delineating a future, phased-in requirement of a full-time to part-time faculty ratio of 75% to 25%, the author believes that the area of staff development as much as staff assessment will play a larger and larger part in institutional research. Volume 41 of the series New Directions for Community Colleges is devoted to the evaluation and development of staff and faculty and contains several pertinent articles. In one article, the volume editor Al Smith discusses seven distinct programs for faculty evaluation devised by different community colleges, and he concludes, "The shift to staff evaluation should enhance employee morale, job satisfaction, and staff productivity. Evaluation should enable employees to see ways to grow without leaving their current jobs. This should be a healthy development in a profession where there is currently little opportunity for job mobility either externally or internally." (Smith, 1983, p. 8)

William Cashin is concerned with the use of student ratings as measures of teacher quality. He states, "Many two-year institutions do not have merit pay systems, academic rank, or even tenure. At these institutions, retention or termination is the only real personnel decision." (Cashin, 1983, p. 59) He discusses the importance of the readability level of the rating forms as possible causes of mis-rating by students, but he also adds, "If one is willing to accept ratings by colleagues or administrators as a way of validating student ratings, studies have found correlations between student ratings and colleague or administrator ratings to range from .43 to .69." (Cashin, 1983, p. 61) The area of the type

of evaluation instruments to employ and the uses to which they should be put is largely unexamined and should be fruitful for institutional research concerns.

C. Decision making for program development and change

It is with difficulty that I create a separate category of "research for decision making." As stated in the introduction, decision making comes as a result of all the above types and purposes of research. According to William Ramsey, "Research can be defined as a process to help institutions define their goals and purposes, identify their programs and policies that meet these goals, evaluate programs and find out whether they are useful to the institution, and chart the flow of resources to determine the cost effectiveness of the programs." (Ramsey, 1981, 9. 26) The major divisional areas are in the distinction of short-term studies for immediate decision making versus long-term studies for future planning.

Mantha Mehallis classifies the areas of institutional research relevant for college administration decision making into the following categories:

Professional development (See faculty/staff development above)

Administrative applications (See efficiency/effectiveness

studies above)

Management (See efficiency studies above)

Planning (See effectiveness and needs assessment studies
above)

Evaluation (See faculty/staff development and effectiveness
studies above)

Values clarification (Not mentioned in my categories - I
consider this to be an aspect of criteria used
rather than an area of research)

(Mehallis, 1981, pp. 95-104)

Our times are characterized by public demands for accountability in education and the coupling of funds tied to demonstrated program effectiveness. This is not to be rued, but to be welcomed as an opportunity to improve ourselves in delivering the product we say we can deliver. Warren Groff puts the situation in these words, "American managers in business and education are trained primarily in directing dynamic growth, measured in quantifiable variables - full-time equivalent (FTE) students, head counts, size of mainframe, number of terminals per FTE, and so on. Many schools and colleges have been trimming the fat, and some have gone into bankruptcy. Managing the downside is a much tougher task than directing dynamic growth. In the long run, this form of natural selection can produce a stronger American education and training industry." (Groff, 1986, pp. 71-72)

A considerable number of studies are coming out in the area of integrating IR into the decision making process. Miami-Dade Community College appears to be a center for such activity. Two of their papers to be recommended are found on the ERIC database (the Junior College Clearinghouse): "Integrating Research into Decision Making" (ED 239 674) written by John Losak and Cathy Morris. Another is authored by Ted Wright and entitled, "Who Uses Institutional Research and Why?" (ED 267 879) Both studies (and the majority of other studies) found that perseverance rates (retention and attrition) are the areas of study most requested by college administrators. Whether this is truly the area that the administrators should focus on is open to debate, and some investigators have made recommendations that the institutional researchers ought to report directly to the college presidents and be included in shaping policy. This may or may not interfere with the concept of the impartiality and objectivity of research; some theorists would say it does (e.g Michael Scriven), other would say that impartiality is less important than gathering information that is likely to actually be put to use by decision makers (e.g. Cronbach, Stufflebeam, Alkin, Cooley, Stake, and others).

D. Public relations and marketing

The major aspect of marketing research carried out by IR offices consists of market surveys and are frequently

indistinguishable from the needs assessments noted above. Phone surveys and questionnaires are employed, often rather hurriedly put together and with a definitely informal tone. Community colleges utilize all channels of communication with the public in attempting to create a higher awareness of their offerings: radio, television, the print media, and fliers and brochures in mass mailings or targeted to special interest groups. Some of the so-called surveys are little more than "sunshine reports" intended to furnish only happy numbers of community awareness of the college for release in the local press. However, with the cross-fire that community colleges have been subjected to in the last decade, it is hardly surprising that some occasionally feel the need to fire back.

Public relations writing is often couched in battle terms: first line of offense, targeting the group, strategic marketing, etc. William Harper proposes three areas of public relations to be of interest in an effective PR program: internal communications, external communications, and development. (Harper, 1977, p. 3) Slocum and Johnson state very clearly, "The marketing of a college is very much like the marketing of any other product - it includes encouraging consumers to choose that product rather than doing without it or selecting a competitor." (Slocum and Johnson, 1977, p. 73) This may be disturbing reading to some: should one college compete with another when both of them are receiving state funds for their operations? Should our tax money be spent advertising education? On the other hand, if it is not advertised, would only those with high resources and access to information networks be the

ones to take advantage of the college's offerings?

The concept of "truth in advertising" is currently being argued in all sectors of American business. In order to ensure that community college marketers better understand the college's strength and functions, Kelly and Otto recommend the close relationship and constant communication between college administration, institutional research personnel, and the public relations office. They declare, "The health and vitality of an institution is to a large extent directly proportional to the integration of the comfort and confidence levels of those selling the campus, those conducting research about the campus, and those leading the campus." (Kelly and Otto, 1986, p. 76) The thrust of this statement is corroborated in most of the literature regarding the employment of institutional research into public relations efforts.

III. Standards: What Constitutes Good Institutional Research?

The standards to be noted here arise directly from the descriptions of the research conducted as set out above and from accepted research guidelines. First of all, all studies must follow acceptable sampling, statistical, definitional, and evaluative procedures. As an example, we cannot talk about transfer without defining what transfer means and making sure that the data we use

to support our statements have been collected on the basis of the same definition. Similarly, if a telephone survey is to have any validity, the non-response rate must be made explicit, and, for even better use of the results, some investigation into the causes of non-response must be conducted.

In addition to these general standards applying to all research (those of validity, reliability, and objectivity), the concepts of practicality and timeliness are especially important in institutional research. The research findings must be presented to the decision makers in useful formats (^{see} Ted Wright, 1985, on the formats preferred by administrators), and they must be available when they are needed, not the semester after. This is good research.

If we break down the IR by purpose as I have done above, we may see some refocusing on certain elements of the criterion list depending on the types of research. For the sake of collecting enrollment and other facts for reporting purposes, the data must be complete, appropriately categorized, and any discrepancies accounted for. The source of the data must be examined: is the enrollment form or questionnaire readable at the student's level? Does it ask the right questions? Are any important questions left unasked? Efficiency data must be compared to a standard of effectiveness to have any meaning, i.e. not just the cost of the product, but the cost in relation to the goal and the quality of educational attainment. The interpretation of effectiveness studies is essentially similar: in order to draw conclusions concerning

educational outcomes, one must clearly specify the criteria used and specify arguments in favor of those criteria. Needs assessments and other present/potential student body descriptions must state sampling system, number of respondents, non-response rates, actual questions, rationale for multiple-choice formats if these are used, and the statistical procedures employed and from which one draws conclusions. It is most certainly the business of the IR office to guarantee that appropriate research methods are employed in all its work.

IV. Samples of Institutional Research Studies

A. Coast Community Colleges Community Telephone Survey 1980

This survey was undertaken in order to assess:

- * the effectiveness of the District's marketing efforts
- * the community's perceptions of the relative importance of
community college functions and services
- * the community's propensity to take part in District programs
and services
and
- * the educational interests and needs of the community.

(Butler, 1984, introduction)

As we can see, the purposes are those of marketing to present and future constituencies and an informal self-assessment of educational needs by respondents. Regarding sampling, the report states that "Within a 4% error margin, we are 98% confident that the 546 interviews from the survey accurately represent the 337,000 adults (age 18 and over) that reside within the Coast Community College District." The District Research office has published eight reports based on the survey, all of which are available from the District office. (I have included numbers 1 and 8 in the list of references.)

According to the standards set out above, how does this study measure up? On the positive side, the actual questions spoken by the interviewers are given in Appendix A of report # 8. This form also shows clearly how an interviewer should skip questions if not relevant, how to record non-compliance or non-response, etc. The interviewer guidelines are excellent. Most of the questions are fairly straight-forward and the coding of the responses should not pose any major problem. However, there are two areas of concern with the survey: that the non-response rate is not given nor discussed (perhaps because the person picking up the phone did not speak English sufficiently to answer?), and that no mention is made of the uses to which the survey answers were put. One certainly cannot require this in a research report, but it ~~certainly~~ would be enlightening to see. Other than this, it is a marketing survey, and the college administration will have to decide if it provides

them with the information they need to make program decisions.

B. Community Needs Assessment 1987

(Cerritos Community College District)

This study was carried out to "assess the needs of the community with regard to educational programs and services provided by Cerritos College." The actual questions are included in the report, which is commendable. The individual researcher can then draw conclusions regarding the validity of each item, some of which I will examine below. This study used randomly selected telephone numbers (as did the Coast study), and noted that "Over seven thousand households were contacted resulting in 1,050 personal interviews." This is a much larger data base than that of the Coast study, but it is in fact only a response rate of about 14%. As in the Coast study, this needs assessment attempts to describe the characteristics of the respondents in the categories gender, age, ethnicity, household income, and education level. The Cerritos study adds sections on a respondent's previous experience with the college.

Other than wondering about causes of non-response, I'm concerned about the wording and interpretation of certain questions and answers. The first question asks whether the respondent has heard of Cerritos. Obviously, since the name has already been mentioned, and it is an institution of higher learning to boot, it

is highly likely that most people would say yes. In fact, 95% of the respondents did. However, they don't know much about the college: the admission requirements, when the fall semester starts, how much it costs, etc. Several questions ask the respondents to rate on a ten-point scale the importance of various college services and purposes. Naturally, the results show that everything is rated highly, and to distinguish between them is dubious use of statistics. Similar critique could be given to most of the survey items. The conclusion is clear: the wording of questions and responses solicited are crucial in creating a study whose findings are of practical value.

C. Institutional Student Retention Progress Report,
Gainesville College, 1987-88

One study that is not a "sunshine report" comes from Gainesville, Georgia, and is a study of the retention, attrition, and graduation rates of its student body. It is an open access school admitting, as they say "students with a wide range of academic experiences, abilities, achievement levels, interests, and goals." (p. 3) Demographic studies show that "according to the 1980 census, the area which Gainesville College serves is considerably below the state of Georgia average in educational attainment." (p.3) The study is massive and detailed. It concludes that its transfer rate is dismal, but adds that "retention should and will

be a byproduct of a quality educational program designed to provide appropriate experiences to facilitate the academic and personal development of its students." (p. 25) The report makes a series of recommendations concerning the improvement of retention and achieving a racial balance similar to its service area, but it also notes that it cannot do magic. Providing the types of services that its clientele is willing to undergo is its main concern.

This study is quite clear and well founded although some of the data are rather small upon which to draw any conclusions. For example, on page 19 the study notes that two black students were admitted as full time first time freshmen in 1984 and that one had graduated at Gainesville by 1987, giving a graduation rate of 50%. If one reported only the 50%, it would indeed be misuse of statistics, but the report does include the actual number. My conclusion is that in spite of its small number base, this is a thorough report.

D. Los Angeles Community College District Action Report 1987

This IR report concerns formative issues of curriculum improvement at the L.A. Community College District campuses. The group of investigators developed a series of recommendations for action in 22 areas directly and marginally related to curriculum concerns, ranging from writing-across-the-curriculum to awareness of health care. The method consisted of expert opinion gathered

from involved persons. All the persons comprising the group would be expected to have direct awareness of the current material, personnel, and level of instruction in the 22 areas and one may therefore consider their opinions to carry weight. The result of the study is an action-oriented package, with clearly stated divisions, goals, background information, problem statements, and specific recommendations. It ought to be a used and useful document, while not research in its traditional sense.

E. The Los Rios Transfer Centers: A First Year Evaluation

(August 1987)

Another type of self-evaluation was conducted by the Los Rios Community College District (California) in 1987 of their transfer center program. This report evidences the necessity of the same caveats as other such studies intended for public dissemination: the fact that it is unlikely that the college would publish any findings that state dollars were unwisely spent. While not wanting to fault this particular study, the author finds that a dose of skepticism concerning the universally positive conclusions of this type of study is warranted.

However, this study does what it intended to do. It polled 1,400 students who had used the Transfer Centers during their first year of operation and got a response rate of 48.5%, quite respectable in questionnaire research. The questions are those of

satisfaction (very good, good, average, etc.) and specific questions regarding an individual's transfer. Once again, one may quibble about the wording of individual items, but this is generally so of all survey instruments. For example, question 8 (What is your current educational status?) has the following answer choice available: "Transferred, but not attending now." I wonder what that option means to the person completing the survey. The statistical methods used are described and reasoned for, and the reasons for an adjusted response rate clearly given. It is a clear document and well presented.

F. S.I.Q. Student Information Questionnaire, Fall 1984

The San Francisco Community College District has conducted a questionnaire of its student body every other year since 1972. (Moss, 1986, p. 14) It is a decision-oriented research project intended to describe pertinent aspects of the students' daily lives in connection with their study at the District's Community College Centers (open access centers with no formal registration process) and at City College, a traditional community college. The S.I.Q. consists of a one page multiple-choice format questionnaire which can easily be adjusted to changes in the student population. However, as Judith Moss points out, one must be extremely careful in making changes as that would invalidate longitudinal studies. She also states regarding the value of the S.I.Q., "The uses range

from serving as a reference to answering simple requests to influencing policy." (Moss, 1986, p. 17) Some of these uses are: parking and transportation arguments and decisions, location of facilities, student services, and program planning and evaluation. (Moss, 1986, pp. 17-22)

In the actual report of the S.I.Q. from 1984, Moss notes one important negative aspect of the questionnaire, namely that it is anonymous. She says, "A significant drawback in anonymous questionnaires is not having the ability to do any student follow-up, for example how a particular student's educational objectives have changed or how they have been met." (Moss, 1984, p. 1.1) This is indeed a concern, but asking students to write in their names or student numbers is thought to generate less valid and reliable data, and so one aspect of research is sacrificed due to the relevance of another.

V. Conclusions

There can be little doubt that IR fulfills an essential function at community colleges. Whether in times of plenty or times of scarcity, no rational management can exist without a fact-based in-depth knowledge of the past and present, and no reasonable planning for the future can occur without a factual basis on which to make projections. However, most researchers conclude that as it stands, there is too little emphasis on the IR activity. James

Wattenbarger states, "Studies founded upon institutional research have been almost universal that most colleges provide inadequate support and attention to the activity." (Wattenbarger, 1983, p. 58) Richard Richardson adds his voice to the many desiring to set research agendas for community college IR, but he ends on a positive note: "The most promising sign currently on the horizon involves the growing awareness on the part of community college leaders of the importance of knowing more about the institutions they administer. ... We will learn more about them because we cannot afford the alternative of operating in the dark." (Richardson, 1985, p. 8) I second that emotion.

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